

**BEST AVAILABLE COPY**Patent  
10007744-1REMARKS

Claims 1-5, 11-14 and 21-26 remain pending in this application. Reconsideration in light of the remarks made herein is respectfully requested.

**Rejection Under 35 U.S.C. § 103(a)**

Claims 1-3, 5-7, 8, 10-14 and 21-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hostetler* (U.S. Patent No. 6,675,476, hereinafter *Hostetler*) in view of *Wong et al.* (U.S. Patent No. 5,211,806, hereinafter *Wong*). Claims 6-10 were cancelled in the preceding amendment. Applicant respectfully traverses.

Independent Claims 1, 3 and 5

Independent claims 1, 3 and 5 recite a method of etching a substrate surface comprising depositing a metal layer over an entire top surface of the passivation material. The Office Action points out that *Hostetler* fails to disclose this feature (Office Action, page 5, lines 19-20). The Office Action then asserts the feature (i.e., a conductive layer 42 is formed over passivation layer 40) is disclosed in *Wong* and that it would have been obvious for someone skilled in the art to modify *Hostetler* by depositing a metal layer over the entire top surface of the passivation material as disclosed in *Wong* (Office Action, page 6, first paragraph). Such a combination results in a non-functional device.

*Hostetler* discloses a tantalum layer 110 disposed on a passivation layer 108 (*Hostetler*, column 4, lines 8-9 and figure 1B). Figure 1B shows gaps in the tantalum layer 110. *Hostetler* further discloses that the tantalum layer 110 defines the heating resistors for the printhead (*Hostetler*, column 4, line 10). *Hostetler* intentionally includes gaps in the tantalum layer 110 for the heating resistors. In fact, all the figures in *Hostetler* show gaps in the tantalum layer 110. These gaps are important and cannot be removed. If *Hostetler* were modified by depositing a metal layer over the entire top surface of the passivation material, there would be no heating resistors for the printhead. These resistors are needed to heat the

**BEST AVAILABLE COPY**Patent  
10007744-1

ink for expulsion. This would render the printhead nonfunctional. Therefore, in view of the above arguments, claim 1 is patentable over *Hostetler* in view of *Wong*.

Dependent Claim 2, 4 and 21-22

Claims 2, 4 and 21-22 depend from claim 1 adding structural features that more particularly define the invention and further distinguish over the cited references and prior art of record and are patentable for the same reasons. Applicant respectfully requests that this rejection be withdrawn.

In addition, claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hostetler* and further in view of *Kawamura et al* (U.S. Patent No. 6,543,884, hereinafter *Kawamura*). *Kawamura* does not disclose or suggest "depositing a metal layer over the entire top surface of the passivation material" making claim 4 patentable over any combination of *Hostetler* and *Kawamura*. Applicant respectfully requests that this rejection be withdrawn.

Independent Claim 11

The Office Action asserts Applicant's previous arguments are moot because the prior art failed to address depositing a metal layer over an entire top surface of the passivation material (Office Action, page 8, line 21 - page 9, line 2). Applicant fails to understand how the arguments are moot when claim 11 recites no similar limitation. Applicant asks that the Examiner consider the following traverse.

Independent claim 11 recites a method of fabricating multiple layers of a thermal inkjet printhead that includes a substrate and a trench for moving ink across the substrate, as well as drop generator components for ejecting drops of ink from the substrate, comprising the steps of providing on the substrate a layer to serve both as a drop generator component and as a mask to define the trench for etching. The drop generator component may be a transducer 16, a transistor 18 and/or a conductor 20 (paragraph 36, figure 8). In the Office

**BEST AVAILABLE COPY**Patent  
10007744-1

Action, the Examiner fails to specifically identify a passage in *Hostetler* or *Wong* that discloses providing on the substrate a layer to serve both as a drop generator component and as a mask to define the trench for etching. Applicant asserts that *Hostetler* and *Wong*, solely or in combination, fail to teach or suggest providing on the substrate a layer to serve both as a drop generator component and as a mask to define the trench for etching. For at least the reasons discussed above, Applicant submits that claim 11 is patentably distinct over *Hostetler* and *Wong*.

**Dependent Claims 12-14**

Claims 12-14 depend from claim 11 adding structural features that more particularly define the invention and further distinguish over the cited references and prior art of record and are patentable for the same reasons. Applicant respectfully requests that this rejection be withdrawn.

**Rejection Under 35 U.S.C. § 102(b)**

Claims 23-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Hostetler*. The Office Action asserts that the applicant's previous arguments are moot because the prior art failed to address depositing a metal layer over an entire top surface of the passivation material (Office Action, page 8, line 21 - page 9, line 2). Applicant fails to understand how the arguments are moot when the claim language recites no similar limitation. Applicant asks that the Examiner consider the following traverse.

**Independent Claim 23**

Independent claim 23 recites a method of etching a substrate surface comprising fabricating, on a substrate, a drop generator component that provides for controlled expulsion of liquid. The drop generator component may be a transducer 16, a transistor 18 and/or a conductor 20 (paragraph 36, figure 8). The Office Action fails to specifically identify a passage in *Hostetler*, *Kawamura* or *Wong* that discloses fabricating, on a substrate, a drop

**BEST AVAILABLE COPY**Patent  
10007744-1

generator component that provides for controlled expulsion of liquid. Applicant asserts that *Hostetler* fails to teach or suggest fabricating, on a substrate, a drop generator component that provides for controlled expulsion of liquid. For at least the reasons discussed above, Applicant submits that claim 23 is patentable over *Hostetler*.

Dependent Claims 24-26

Claims 24-26 depend from claim 23 adding structural features that more particularly define the invention and further distinguish over the cited references and prior art of record and are patentable for the same reasons. For the reasons state above, Applicant respectfully requests that this rejection be withdrawn.

**BEST AVAILABLE COPY**Patent  
10007744-1**CONCLUSION**

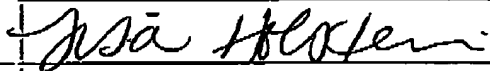
In view of the remarks above, it is respectfully submitted that all the pending claims are in condition for allowance, and such action is earnestly solicited.

If the Examiner believes an interview would be helpful to advance this case, she is invited to contact the undersigned attorney.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 9, 2006.

Very truly yours,

SNELL &amp; WILMER L.L.P.

By: Lisa Holstein

Signature

Dated: March 9, 2006



Ketan S. Vakil  
Registration No. 43,215  
600 Anton Boulevard, Suite 1400  
Costa Mesa, California 92626-7689  
Telephone: (714) 427-7405